

Lösungen:

| | | Punkte |
|----------|---|--------|
| 1 | <p>Bitte finden Sie die quadratische Ergänzung</p> <p>a) $64a^4g^4 - 176a^2g^4$ L: $64a^4g^4 - 176a^2g^4 + 121g^4 = (8a^2g^2 - 11g^2)^2$</p> <p>b) $x^2 + px$ L: $x^2 + px + 0,25p^2 = (x + 0,5p)^2$;</p> <p>c) $25w^2 + 110d^2w$ L: $25w^2 + 110d^2w + 121d^4 = (5w + 11d^2)^2$</p> <p>d) $\frac{9}{49}Z^2 - \frac{78}{35}ZW$ L: $\frac{9}{49}Z^2 - \frac{78}{35}ZW + \frac{169}{25}W^2 = (\frac{3}{7}Z - \frac{13}{5}W)^2$</p> | 8 |
| 2 | <p>Bitte berechnen Sie die Unbekannten</p> <p>a) $-1,9(x + 10,1) - 8,4(x - 9,2) + 3,1 = -2,67$ L: $x = 6,2$</p> <p>b) $((\frac{6}{11}b - \frac{3}{10}) * \frac{11}{6} - \frac{7}{2}) * (-\frac{3}{4}) - \frac{3}{8} = \frac{263}{80}$ L: $b = -\frac{5}{6}$</p> <p>c) $\frac{\frac{9}{4}}{-\frac{10}{11}y - \frac{8}{9}} - \frac{9}{8} = -\frac{51}{16}$ L: $y = \frac{2}{9}$</p> | 6 |
| 3 | <p>Bitte berechnen Sie</p> <p>a) $\frac{10}{11} : ((\frac{3}{7} : \frac{1}{6}) : \frac{3}{4})$ L: $\frac{35}{132}$</p> <p>b) $((\frac{7}{9} : \frac{1}{2}) : \frac{3}{2}) : \frac{5}{6}$ L: $\frac{56}{45}$</p> <p>c) $(\frac{10}{9} : \frac{3}{10}) : (\frac{1}{2} : \frac{1}{2})$ L: $\frac{100}{27}$</p> | 6 |
| 4 | <p>Bitte berechnen Sie</p> <p>a) $\frac{(-\frac{7}{6} - \frac{-3}{2} - \frac{5}{6}) * (\frac{3}{7} - \frac{-3}{2} + \frac{-7}{2})}{(\frac{-4}{5} - \frac{-7}{5} - \frac{4}{5}) * (\frac{-9}{5} + \frac{-2}{3} - \frac{-4}{5})}$ L: $-\frac{55}{14}$</p> | 2 |